

to the Bill does not make any reference to this. If the hon. Member wants I can look into the statement of objects and reasons and let him know.

[*Translation*]

MR. SPEAKER: Mishraji, you believe in non-violence. What question you want to ask?

SHRI RAM NAGINA MISHRA: Sir, I am not concerned with the number of the licenses of fire-arms issued to sportsmen. I am interested in licenses being issued to general public. With my personal knowledge I can say that in Terai region of Pilibhit district and in my region and in Deoria and Gorakhpur districts of U.P. licenses of fire-arms have been managed from Bihar and Punjab illegally. There is a rule that arms brought from another State should have their entry in home State also, but there is no entry of such weapons. Would the Minister of Home Affairs propose to conduct an investigation regarding the number of fire-arms in the possession of the people in Terai region of Gorakhpur, Deoria and Pilibhit districts which have been licensed by the State Governments of Bihar and Punjab. My second Question is also related to the first one. Sir, district magistrate has got the power to issue licenses for fire-arms. I would like to know the names of the two collectors of Bihar and Punjab who are minting money by way of issuing licenses to the people of Uttar Pradesh illegally. I would like to submit that the hon. Minister should make efforts to frame such rules so that people may not manage weapons illegally because illegal arms are being used by the criminals.

MR. SPEAKER: It does not fall under the scope of the question and you go on speaking.

SHRI RAM NAGINA MISHRA: My Question has not been replied.

[*English*]

MR. SPEAKER: Do you think you can answer this question?

SHRI P. CHIDAMBARAM: The power to issue licenses for non-prohibited bore rests with the State Governments. I am not denying that there are a large number of unlicensed arms in various States. We have repeatedly emphasised upon the State Governments that they should take strict action in respect of unlicensed arms. I am aware of the Terai region's problems. We have told the U.P. Government. We shall do so again.

[*Translation*]

SHRI RAM NAGINA MISHRA: Sir, a collector in Bihar has granted a license for firearm to a person of U.P. and a collector in Punjab has granted a license to a person belonging to Pilibhit.

MR. SPEAKER: It does not fall within the scope of the question. You may ask another question.

SHRI RAM NAGINA MISHRA: I would like to know whether he proposes to conduct an enquiry into it or not? Illegal possession of firearms is giving further rise to the terrorism.

[*English*]

Performance of Canadian Heavy Water Reactors

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*944. SHRI G. S. BASAVARAJU:
SHRI S. M. GURADDI:

Will the PRIME MINISTER be pleased to state:

(a) whether Canada has discovered a design flaw in the Heavy Water reactors in Canada;

(b) if so, whether the Canadian heavy water reactors operating in India have also been affected;

(c) if so, to what extent;

(d) whether Canada is now modifying the system to switch over to four garter springs in place of two for safety reasons;

(e) whether Canadian heavy water reactors operating in India will also be modified; and

(f) if so, to what extent these defects have been removed in the Indian Heavy Water Reactors?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI K. R. NARAYANAN): (a) to (f). A statement is given below.

STATEMENT

(a) to (f). The design flaw detected in Canada relates to the garter spring system which separates the concentric coolant tubes from the calandria tubes. The earlier design provides for two garter springs which were observed to have shifted from their original position over a period of time. The system is being modified to provide four garter springs in place of two in the Canadian reactors.

The Indian Pressurised Heavy Water Reactor units at Rajasthan and Madras also have two garter springs in each channel separating the coolant tubes from the Calandria tubes. Remote techniques have been devised indigenously to locate the precise position of the garter springs in the coolant channels and to move these garter springs back to the original position, if necessary. These techniques have been utilised recently in Unit 2 of Madras Atomic Power Station prior to commissioning to ensure that the garter springs are at the correct position. From Narora onwards, the design has been modified to provide four garter springs.

SHRI G. S. BASAVARAJU: Mr. Speaker, Sir, there is no specific answer to my question. The Canadian heavy water reactor, in which they have found a flaw in Canada, has been replaced with certain modifications.

I would like to know from the hon. Minister whether similar reactors working

in Rajasthan and Madras do not have the same defects. Is the Government considering to modify the reactors as per the new Canadian specifications? If it is not so, I would like to know the reasons.

SHRI K. R. NARAYANAN: We have not modified the reactors in Rajasthan and Madras simply because they have not provided any problems. Apart from that, we have indigenously devised a technology for detecting the actual position for the garter spring and also a technology to reposition it correctly if it has shifted from the original position. We do not expect any problems there.

As I said, as regards Narora, we have introduced four garter springs just as Canadians have done. But we have developed this on our own because we had no access to Canadian improvements in technology.

SHRI G. S. BASAVARAJU: What about Madras and Rajasthan reactors?

SHRI K. R. NARAYANAN: I have said that Madras and Rajasthan reactors are working on two garter spring system. They have produced no problem. If they produce any problem, we have developed the technology of repositioning the garter springs.

I would like to add that -- the hon. Member knows -- this spring goes around the coolant channel to keep it in the right position. Even if there is some slight shift, it is not likely to lead to any kind of serious damage. What is important is the correcting method. We have developed that. In all the future reactors we would have the improved design.

SHRI G. S. BASAVARAJU: My second supplementary is: What is the total number of Canadian heavy water reactors operating in this country? Does the Indian Government propose to install the Canadian reactors at Kaiga which is under process in Karnataka?

SHRI K. R. NARAYANAN: There are, at present, four reactors of the pressurised heavy water type operating in the country.

Narora is also on same type of design and technology. The future reactors are also primarily based on this, though, as the hon. Member knows, we are going into other types of breeder reactors.

There is also a likelihood of our getting the Soviet reactors which are of a different technology.

SHRI RAM SINGH YADAV: May I know from the hon. Minister whether the atomic power plant which was installed in Rajasthan Kota in 1973-74 was expected that both its units could function regularly but No.1 unit has not been generating power since 1981 and its generation was expected to be 200 MW but it is less than one-fourth of its capacity? Similar is the case with heavy water reactors which is being planted at Kota. So, could we infer that the technology with regard to the atomic power plant which has been purchased from Canada had been found defective and not upto date? What step has the Government taken when it was found that the atomic power unit No.1 at Kota was with defective technology? Then, why did the Government enter into the contract to purchase the technology of heavy water reactors from Canada?

SHRI K. R. NARAYANAN: Rajasthan 1 reactor was a prototype reactor which was got introduced with the Canadian technology, when the Canadian technology itself was not fully developed and that is why we call it a prototype reactor. It has been working well but it showed one defect in the sense of leakage in the end-shield; this has been plugged by our technologists, we have to re-rate it into 100 MW capacity as a matter of caution so that there may not be any kind of danger. As I said, since then, we have developed the technology ourselves and that is the kind used in Rajasthan-2, Madras and Narora. Madras and Narora are based on this improved technology which not only meets our needs and avoids any sort of danger, but we consider them as some of the safest reactors in the world.

Liquid Propulsion Centre at Mahendragiri

*947. SHRI N. DENNIS: Will the PRIME MINISTER be pleased to state:

(a) whether there is proposal to expand the Liquid Propulsion Centre at Mahendragiri; and

(b) whether Government propose to convert this centre into an independent unit?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI K. R. NARAYANAN): (a) and (b). A statement is given below.

STATEMENT

(a) The Liquid Propulsion Test Facilities (LPTF) at Mahendragiri are a part of the Indian Space Research Organisation (ISRO) and presently comes under the Liquid Propulsion Systems Centre (LPSC) of ISRO/Department of Space. At present the working LPTF is directed towards ongoing projects/programmes. The existing facilities at Mahendragiri will be augmented appropriately where necessary, to meet the future testing requirements in the context of development of advanced liquid propulsion systems.

(b) The question of converting the Test Facilities into an independent autonomous unit does not arise, since it is a major ISRO Facility mainly catering for the ground testing of Liquid Engine stages and subsystems developed for the Indian Space Programme. It thus forms a part of the facilities set up for supporting a well integrated Programme.

SHRI N. DENNIS: Mahendragiri, the southern part of the Western Ghats, 10 kms. from Kanyakumari, has been selected as a suitable place for the new activities of liquid propulsion technology, for space and missiles in our country. Mahendragiri has been given only a sub-centre status. It is